European Sealing Association e.V.

ESA Position Statement on ATEX Directive 2014/34/EU and its applicability to Bearing Isolator Seals

April 2016

The new Directive 2014/34/EU applies to equipment and protective systems for use in potentially explosive atmospheres and is mandatory as from 20 April 2016. It replaces Directive 94/9/EC. With this revised Directive, the essential health and safety requirements have not changed. It was the aim of the revision to harmonize the requirements with the New Legislative Framework - NFL.

Preface:
The precedent Directive ATEX 94/9/EC (ATEX 95) – 'Equipment and Protective Systems intended for use in potentially explosive atmospheres' has been mandatory since July 1st 2003. On Feb 22nd 2005, the EC ATEX Standing Committee provided *a "Consideration document*" § on mechanical seals defining when a mechanical seal is to be considered a machinery element or an ATEX Component. Bearing Isolator seals should be considered in a similar manner to mechanical seals.

The Members of the European Sealing Association (ESA) Mechanical Seals Division have developed the following "*Position Statement*" to further clarify related issues.

A. DEFINITION AND REQUIREMENTS FOR BEARINIG ISOLATOR SEALS CLASSIFIED AS MACHINERY ELEMENTS

Bearing Isolator Seals produced by Members of the ESA Mechanical Seals Division are **"Machinery elements"**, which do **not** fall within the ATEX Directive*. Machinery Elements are defined as:

- catalogue bearing isolator seals and their parts selected by the equipment manufacturer or equipment user alone or with assistance from the seal manufacturer
- bearing isolator seals stocked by the equipment manufacturer or end user for general applications

Bearing isolators will also be machinery elements if a risk assessment by the seal or equipment manufacturer shows that the seal is not expected to be an ignition source even in the event of fault conditions.

Because Machinery elements are not defined within the ATEX Directive* they cannot be supplied with a Declaration of Conformity. However, Machinery elements are suitable for incorporation into rotating equipment that is classified as Groups 1 and 2, categories M2, 2 and 3 in potentially explosive gas or dust mixtures

* Directive 2014/34/EU (precedent: Directive 94/9/EC)